



#32  
Elec.  
12/11/01  
Patent

Attorney's Docket No. 001560-377

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of )  
 )  
Keiko SAKAKIBARA et al. ) Group Art Unit: 1655  
 )  
Application No.: 09/446,089 ) Examiner: Juliet C. Einsmann  
 )  
Filed: December 17, 1999 )  
 )  
For: GENE ENCODING A PROTEIN )  
HAVING AURONE SYNTHESIS )  
ACTIVITY )

RECEIVED  
DEC 03 2001  
TECH CENTER 1600/2900

**RESPONSE TO RESTRICTION REQUIREMENT**

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

In complete response to the Restriction Requirement dated September 6, 2001,  
applicants offer the following remarks.

In the Restriction Requirement, the claims of the instant invention were divided into  
the following groups of invention:

- I. Claims 1-8, entirely, and claim 9, in part, drawn to nucleic acids, vectors,  
and host cells (claim 9 is included in this group insofar as it encompasses  
plant host cells);
- II. Claims 10-11, drawn to proteins;
- III. Claims 12-13, drawn to methods for producing and harvesting proteins;
- IV. Claim 14, drawn to methods for synthesizing aurones;
- V. Claims 15, drawn to methods for transforming plants; and
- VI. Claim 9, in part, and claims 16-17, drawn to transgenic plants (claim 9 is  
included in this group insofar as it comprises entire transgenic plants).

Applicants hereby elect the Group I invention, directed to claims 1-8 and claim 9 in part, with traverse.

The traversal is based upon the fact that the instant application was filed under §371. Applicants are thus entitled to a “unity of invention standard” for determining restriction. It is respectfully submitted that “unity of invention” exists in the instant case. As stated by the Examiner, some polyphenol oxidase (PPO) genes were known prior to the priority date of the instant application. However, *no* enzymes which synthesize aurones from calcones were known. Similarly, no genes encoding such enzymes were known prior to the instant invention. The cited Hunt et al reference does not describe or even suggest an aurone synthesizing enzyme, nor a gene encoding same. Hunt et al is thus irrelevant to the instantly claimed invention, and thus is irrelevant to the existence of a “single inventive concept.”

Unity of invention between the claims of the instant application thus exists.

Moreover, according to the MPEP § 803, a restriction between patentably distinct inventions is proper only where there is a serious burden on the Examiner to examine all the claims in a single application. This is true even when appropriate reasons exist for a restriction requirement. In the present application, it is believed that because there is a close relationship between the subject matter of the Group I-VI claims, there would be no serious burden on the Examiner to examine all sets of claims at this time.

Early and favorable action in the form of a Notice of Allowance is respectfully requested.

Response to Restriction Requirement

Application No. 09/446,089

Attorney's Docket No. 001560-377

Page 3

In the event that there are any questions relating to this amendment or the application in general, it would be appreciated if the Examiner would contact the undersigned attorney by telephone at 508-339-3684 so that prosecution would be expedited.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

By: Donna M. Meuth #39,300  
for Donna M. Meuth  
Registration No. 36,607

P.O. Box 1404  
Alexandria, Virginia 22313-1404  
(703) 836-6620

Date: November 29, 2001

165511



RECEIVED  
DEC 03 2001  
TECH CENTER 1000/2900

Patent  
Attorney's Docket No. 001560-377

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor Patent Application of

Keiko SAKAKIBARA et al.

Application No.: 09/446,089

Filed: December 17, 1999

For: GENE ENCODING A PROTEIN  
HAVING AURONE SYNTHESIS  
ACTIVITY

) Group Art Unit: 1655

) Examiner: Juliet C. Einsmann

AMENDMENT/REPLY TRANSMITTAL LETTER

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

Enclosed is a Response to Restriction Requirement for the above-identified patent application.

- ☒ A Petition for Extension of Time is also enclosed.
- ☐ A Terminal Disclaimer and a check for ☐ \$55.00 (248) ☐ \$110.00 (148) to cover the requisite Government fee are also enclosed.
- ☐ Also enclosed is \_\_\_\_\_.
- ☐ Small entity status is hereby claimed.
- ☐ Applicant(s) request continued examination under 37 C.F.R. § 1.114 and enclose the ☐ \$370.00 (279) ☐ \$740.00 (179) fee due under 37 C.F.R. § 1.17(e).
- ☐ Applicant(s) previously submitted \_\_, on \_\_, for which continued examination is requested.
- ☐ Applicant(s) request suspension of action by the Office until at least \_\_, which does not exceed three months from the filing of this RCE, in accordance with 37 C.F.R. § 1.103(c). The required fee under 37 C.F.R. § 1.17(i) is enclosed.
- ☐ A Request for Entry and Consideration of Submission under 37 C.F.R. § 1.129(a) (146/246) is also enclosed.
- ☒ No additional claim fee is required.

☐ An additional claim fee is required, and is calculated as shown below:

| AMENDED CLAIMS   |               |   |              |                   |            |
|--|---------------|---|--------------|-------------------|------------|
|  | NO. OF CLAIMS | HIGHEST NO. OF CLAIMS PREVIOUSLY PAID FOR | EXTRA CLAIMS | RATE              | ADDT'L FEE |
| Total Claims   |               | MINUS =                                   |              | × \$18.00 (103) = |            |
| Independent Claims   |               | MINUS =                                   |              | × \$84.00 (102) = |            |
| If Amendment adds multiple dependent claims, add \$280.00 (104)        |               |   |              |                   |            |
| Total Amendment Fee  |               |   |              |                   |            |
| If small entity status is claimed, subtract 50% of Total Amendment Fee |               |   |              |                   |            |
| TOTAL ADDITIONAL FEE DUE FOR THIS AMENDMENT                            |               |   |              |                   |            |

☐ A claim fee in the amount of \$\_\_\_\_\_ is enclosed.

☐ Charge \$\_\_\_\_\_ to Deposit Account No. 02-4800.

The Commissioner is hereby authorized to charge any appropriate fees under 37 C.F.R. §§ 1.16, 1.17, 1.20(d) and 1.21 that may be required by this paper, and to credit any overpayment, to Deposit Account No. 02-4800. This paper is submitted in duplicate.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

By: Michael K. Mayman #39,300  
for Donna Meuth  
Registration No. 36,607

P.O. Box 1404  
Alexandria, Virginia 22313-1404  
(703) 836-6620

Date: November 29, 2001